

COMMENTS
DRAFT LOW RESOLUTION CORING SUPPLEMENTAL SAMPLING PROGRAM ADDENDUM
SECOND SUPPLEMENTAL SAMPLING PROGRAM CHARACTERIZATION SUMMARY
FOR THE LOWER PASSAIC RIVER STUDY AREA
DATED OCTOBER 2014

<u>No.</u>	<u>General Comments</u>
1	Please revise the title of the report to indicate that it is a draft document.
2	<p>Section 3.9, titled "Significant Observations" gives examples of how the SSP2 data support the data use objectives (DUO) of the program. The examples, however, could be misinterpreted as reflecting consistent patterns in 2,3,7,8 TCDD concentrations, rather than recognizing the variable contaminant distribution within the river. For example, the last bullet on page 3-3 addresses filling in spatial gaps between RM 8.5 and RM 10, and ends with the statement that the "LRC SSP results showed lower surficial sediment concentrations adjacent to these locations." (near LPRT09F, LPR SSP 075 and EMB 159). The statement is correct in that LPRT009F (16,000 ng/Kg) is between SSP2 station 512 (264 ng/Kg) and station 510 (2730 ng/Kg). However, station 510 (2730 ng/Kg) and the next downstream SSP2 station, 509 (16,200 ng/Kg) have concentrations considerably higher than the previously sampled station between them (SSP 470, 11.7 ng/Kg). Similarly near RM 10, within a 300 foot stretch on the eastern shoal, concentrations at station CLRC-062 and EMB stations 158, 159, and 168 ranged from 29 to 12,700 ng/Kg and SSP2 stations 528, 533, and 534 ranged from 1775 to 11,990 ng/Kg.</p> <p>Examples cited to support the second DUO (data to support system understanding, sediment surface concentration mapping, and sediment transport and CFT model parameterization) present the same opportunity to be misinterpreted as general patterns without recognizing the spatial variability in concentrations. In the case of the transect at RM 7.3 mentioned in the second-to-last bullet on page 3-4, it is true that the concentration from the channel (333 ng/Kg at station 13B-0505) is lower than the highest concentration along the transect on the eastern mudflat (34,100 ng/Kg at station 12A-0460), but two other samples on the eastern mudflat between these stations had concentrations of 3 and 118 ng/Kg (stations 13B-0507 and 13B-0506, respectively). The last bullet on page 3-4 refers to "spatial correlation in both the longitudinal direction within the shoal deposit and laterally across the shoal and into the channel." In the same shoal area and approximately 200 feet downstream of the cluster referred to on page 3-4, other samples collected less than 25 feet apart had concentrations ranging from 29 to 2670 ng/kg ((LRC-062 and G0000168, respectively). The four samples in the channel near RM 10 have concentrations of 23, 25, 28, and 40 ng/kg, while 155 feet downstream a concentration of 99 ng/kg was measured from the channel (station CLRC-061) and approximately 200 feet farther downstream in the channel a concentration of 7590 ng/Kg was measured from station 13B-0526).</p> <p>Overall, the text should be revised to address variability and avoid having the reader conclude that the cited examples reflect widespread consistent patterns.</p>

No.	Page No.	Specific Comments
3	Executive Summary, Page ES-2	The text implies that grab samples were analyzed only for total sulfide, acid volatile sulfide/simultaneously extracted metals (AVS/SEM), phosphate (total), total kjeldahl nitrogen (TKN), and ammonia as nitrogen (N). Please clarify.
4	Executive Summary, Page ES-2, second bullet, and Page 2-4, Section 2.2.3, third bullet	Please revise station 13B-047 to the correct station, presumably 13B-0547.
5	Executive Summary, Page ES-2, fifth bullet	Please explain why the 95 percent field completeness goal was not met. In addition, the text after the bullets states that the LRC SSP2 met the DQOs established, although the field completeness goal was not achieved. Please revise the text to indicate that this DQO was not met.
6	Executive Summary, Pages ES-2 to ES-3, and Pages 1-3 and 3-1	At the end of the sentence that starts on Page ES-2, please replace the phrase "because a Removal Action has been completed for the RM 10.9 area" with "because this design-level data is of too high a density for the purposes of this report; sediment data collected from the removal area during the LRC SSP, LRC and benthic sampling events are included." This language should also be changed on Pages 1-3 and 3-1.
7	Page 1-5, Section 1.1.2, second paragraph, last sentence	The reference to SEI and HQI, (2011) for the classification of the three major sections of the river (River Dominant, Mixed, and Estuary Dominant) should not be included with specific mile points. As stated in SEI and HQI (2011), "The locations of the regions in these figures are for conceptual illustration and are not meant to be quantitative."
8	Page 2-1, Section 2.0, second paragraph, second sentence	This sentence states that "Deviations from approved field procedures...were documented in the field records". All deviations from approved procedures should be added to nonconformance reports and summarized in this report.
9	Page 2-6, Section 2.3.1.3, first paragraph, second sentence	As currently written, the numbers in the text add up to only nine bridges, including only two swing bridges. According to Table 2-5, there are three swing bridges. Please revise the text to match Table 2-5.
10	Page 2-10, Section 2.5.1, first bullet	The QAPP states that cores need to have at least 80% recovery to be processed. Please clarify why an exception was made at location 13B-0510. This exception should also be noted in other sections that discuss the 80% requirement, including the executive summary (page ES-2, fifth bullet); the second paragraph of Section 2.2 (page 2-2); and Section 2.2.1 (page 2-3, second paragraph).

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11	Page 2-10, Section 2.6.1	Please explain how the average weights of the non-sediment elements were determined and provide these values. If the core liners were cut to various sizes depending on the recovery, an average liner weight would not be representative.
12	Figures 3-4a and 3-5a	The vertical 2,3,7,8 TCDD concentration profiles for core 547 on these two figures are inconsistent. On Figure 3-4a the highest concentration is at the surface and on Figure 3-5a the highest concentration is below the surface.